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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.     |
|--|-------------|----------------------|---------------------|----------------------|
| 09/973,574   | 10/09/2001  | Michael Waring       | A33882-007220.0135  | 6030                 |
| 21003  | 7590        | 09/03/2004           | EXAMINER            |                      |
| <b>BAKER &amp; BOTTS</b><br>30 ROCKEFELLER PLAZA<br>NEW YORK, NY 10112 |             |                      |                     | WILKINS III, HARRY D |
|  |             | ART UNIT             |                     | PAPER NUMBER         |
|  |             |                      |                     | 1742                 |

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |             |
|------------------------------|------------------------|---------------------|-------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |             |
|                              | 09/973,574             | WARING ET AL.       |             |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     | 1742<br>DJB |
|                              | Harry D Wilkins, III   |                     |             |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 May 2004.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2,4,8-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,4,8-13 and 15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 05 February 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

1. The objection to claim 5 has been withdrawn in view of the cancellation of that claim.
2. The grounds of rejection based on Vega et al presented in the previous office action have been withdrawn in view of Applicant's amendment of claim 1.
3. The grounds of rejection based on Mnich presented in the previous office action have been withdrawn in view of Applicant's remarks regarding the negative teaching against using Cr in Mnich.
4. New grounds of rejection are presented herein.

### ***Claim Objections***

5. Claims 11 and 12 are objected to because of the following informalities: based upon the specification, in reference to the second embodiment, the sixth solution contains nitric acid and is at a pH of 1.0-3.0, not the third solution (see paragraph 46). Thus, examination will be based upon the disclosure of the specification. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1, 2, 4, 8-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradley et al (US 4,310,390) in view of Hartman et al (US 3,053,691) and Stadler et al (US 5,750,014).

Bradley et al teach (see col. 1, lines 9-28, col. 3, lines 50-63 and the paragraph spanning cols. 4 and 5) a method of anodizing aluminum including alkaline cleaning, deoxidizing (inherently with a deoxidizer), anodizing with sulfuric acid and sealing with a solution including sodium dichromate.

Bradley et al do not teach that the sealing solution including sodium dichromate has a pH of 1.0 to 3.0.

However, Bradley et al teach (see col. 1, lines 9-28) that the invention is an improvement over the prior art process which used a separate sealing and coating step. Thus, Bradley et al performs two steps simultaneously, sealing and coating, that the prior art had performed separately, for the purpose of reducing labor involved with moving the aluminum object from one reaction tank to another.

Hartman et al teach (see col. 1, lines 15-54) the prior art process of treating with a chemical conversion coating (sealing) by treatment with sodium dichromate (col 2, lines 58-62) which has a pH of 1-3 (col. 3, lines 7-16) that is controlled by additions of nitric acid.

However, Bradley et al and Hartman et al do not teach supplying each solution from a separate storage tank and removing each solution form the process tank and putting it in a transition tank.

Stadler et al teach (see Fig.1, numerals 32, 34, 36 and 38, "To waste treatment" and abstract) an aluminum anodizing process where each solution is supplied from a storage tank and removing each solution from the process tank and putting it in a transition tank. Stadler et al teach (see cols. 4 and 5) that the single process chamber minimized movement of the articles to be treated (inherently decreasing labor considerations).

Therefore, it would have been obvious to one of ordinary skill in the art to have used the single process chamber with multiple feed tanks as described by Stadler et al for the process of Bradley et al because the single process chamber reduces the amount of labor involved in the anodizing process.

Ensuing from this, one of ordinary skill in the art would have been motivated to take the combined steps of Bradley et al and returned to the prior art separate steps as disclosed by Hartman et al because of the labor savings provided by using the process of Stadler et al. Thus, one of ordinary skill in the art would have used the sodium dichromate solution having a pH of 1.0-3.0 of

Hartman et al, wherein the pH is controlled by adding nitric acid because it provides excellent corrosion resistance and paintability.

Regarding claim 8, the coating step of Hartman et al would have been applied in combination with the sealing step as the sixth solution to be applied.

Regarding claims 11 and 12, the coating step uses a polyacrylamide acid solution that has a preferable pH of 1.0-3.0 with nitric acid used to control the pH (see col. 1, lines 15-54 and col. 3, lines 7-16).

***Response to Arguments***

9. Applicant's arguments with respect to claims 1, 2, 4, 8-13 and 15 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D Wilkins, III whose telephone number is 571-272-1251. The examiner can normally be reached on M-Th 10:00am-8:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harry D Wilkins, III  
Examiner  
Art Unit 1742

hdw

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SUPERVISORY PATENT EXAMINER  
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